

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number: P938519

Luminaire Tested: SQ4-FB-150U-125D-840-1D-UNV-STD-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938519
REPORT IS A COMBINATION OF REPORTS P933640 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-840-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

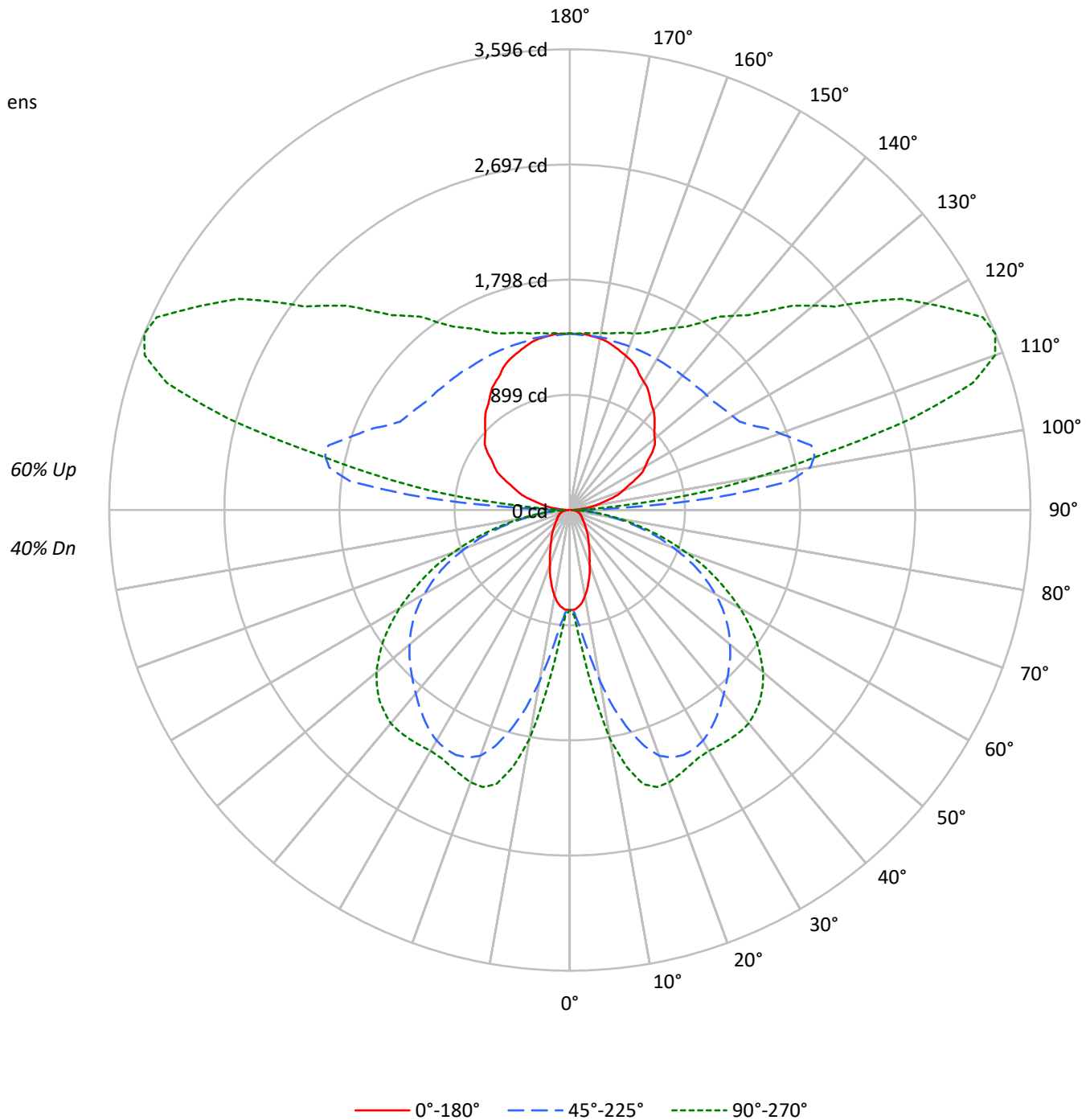
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14967.2 lumens
Efficiency: N/A
Efficacy: 119.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	47	47	47	40
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39	39	39	39	33
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32	32	32	32	27
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27	27	27	27	22
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23	23	23	23	19
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19	19	19	19	16
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17	17	17	17	14
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15	15	15	15	12
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13	13	13	13	10
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11	11	11	11	9
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10	10	10	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4825	4825	4825
5°	4712	5575	6485
10°	4272	8125	10752
15°	3630	10613	12983
20°	2954	12295	13231
25°	2463	12863	12962
30°	2076	12941	12938
35°	1835	12723	13273
40°	1598	12440	13618
45°	1447	12232	13672
50°	1325	12044	13445
55°	1267	11770	12849
60°	1296	11249	11908
65°	1347	10457	10615
70°	1432	9113	8968
75°	1580	7424	6998
80°	1715	5142	4715
85°	1496	2724	2415

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°
 Vertical Angle: 45°
 Luminance: 13672 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	100.9	0.7
10°-20°	447.1	3.0
20°-30°	782.1	5.2
30°-40°	1006.8	6.7
40°-50°	1124.6	7.5
50°-60°	1077.1	7.2
60°-70°	853.6	5.7
70°-80°	501.9	3.4
80°-90°	144.7	1.0
90°-100°	671.4	4.5
100°-110°	1765.0	11.8
110°-120°	1830.1	12.2
120°-130°	1468.0	9.8
130°-140°	1151.8	7.7
140°-150°	884.1	5.9
150°-160°	636.7	4.3
160°-170°	389.6	2.6
170°-180°	131.6	0.9
0°-30°	1330.2	8.9
0°-40°	2337.0	15.6
0°-60°	4538.7	30.3
0°-90°	6039.0	40.3
90°-120°	4266.5	28.5
90°-150°	7770.4	51.9
90°-180°	8928.0	59.7
0°-180°	14967.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	780	780	780	780	780	
5°	760	815	918	1038	1076	70
15°	569	1051	1771	2147	2214	158
25°	364	1191	2109	2202	2204	168
35°	246	1139	1986	2099	2182	153
45°	168	908	1756	2011	2102	130
55°	120	577	1490	1730	1778	110
65°	95	306	1106	1244	1262	94
75°	70	188	607	667	670	74
85°	25	58	150	166	168	27
90°	9	26	70	35	35	9
95°	89	348	1156	596	406	99
105°	318	482	1951	2962	2764	337
115°	565	686	1563	3118	3559	558
125°	786	881	1422	2402	2834	698
135°	936	1031	1377	1939	2199	724
145°	1086	1156	1360	1655	1784	680
155°	1228	1262	1360	1493	1536	564
165°	1325	1342	1360	1413	1431	374
175°	1377	1377	1369	1386	1386	131
180°	1377	1377	1377	1377	1377	



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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9	779.9
2.5°	779.9	779.9	785.0	787.4	792.5	795.0	800.0	805.0	820.0	822.6	827.6
5°	759.9	769.9	802.6	815.1	850.2	897.8	917.9	950.5	1018.2	1038.3	1050.8
7.5°	729.8	752.4	832.6	852.6	940.5	1065.9	1118.5	1188.8	1296.6	1349.2	1391.9
10°	682.1	729.8	872.7	920.4	1063.4	1254.0	1351.8	1449.6	1612.6	1685.3	1712.9
12.5°	629.5	707.2	915.4	980.6	1186.2	1464.6	1582.5	1690.3	1875.9	1973.7	1988.7
15°	569.3	674.6	955.5	1050.8	1316.6	1640.2	1770.6	1903.5	2076.6	2146.7	2164.3
17.5°	516.6	649.5	993.1	1093.4	1417.0	1798.2	1931.0	2041.4	2181.9	2229.5	2242.1
20°	451.4	609.4	1018.2	1148.6	1522.3	1913.6	2041.4	2126.7	2222.0	2252.0	2257.1
22.5°	403.8	566.8	1033.3	1168.7	1592.6	1983.7	2091.6	2159.3	2224.5	2234.6	2237.0
25°	363.7	519.1	1030.8	1191.2	1652.7	2026.4	2109.2	2159.3	2196.9	2202.0	2202.0
27.5°	326.0	466.4	1020.7	1196.3	1697.9	2036.4	2101.6	2136.7	2154.2	2164.3	2164.3
30°	293.4	416.3	995.6	1186.2	1717.9	2026.4	2079.0	2096.6	2114.1	2129.2	2136.7
32.5°	268.3	368.6	958.0	1166.1	1720.4	2001.3	2038.9	2048.9	2074.0	2109.2	2121.6
35°	245.8	321.0	915.4	1138.6	1705.4	1961.2	1986.3	1996.3	2046.4	2099.1	2116.7
37.5°	223.2	285.9	860.3	1090.9	1682.8	1913.6	1931.0	1948.6	2026.4	2089.0	2109.2
40°	200.7	255.8	795.0	1038.3	1647.7	1855.9	1870.9	1898.4	2001.3	2074.0	2094.1
42.5°	183.1	230.7	724.8	983.1	1602.5	1790.7	1813.2	1853.3	1971.2	2048.9	2071.5
45°	168.1	205.6	649.5	907.9	1544.8	1722.9	1755.5	1810.7	1936.1	2011.4	2031.4
47.5°	152.9	188.1	571.8	830.1	1482.2	1655.2	1697.9	1760.5	1888.5	1961.2	1978.8
50°	140.4	170.5	494.1	747.3	1414.4	1582.5	1632.7	1697.9	1828.3	1896.0	1918.5
52.5°	130.4	155.5	421.3	664.6	1336.7	1507.2	1564.9	1632.7	1755.5	1820.7	1835.8
55°	120.3	143.0	358.6	576.8	1256.4	1427.0	1489.7	1554.9	1675.3	1730.5	1740.5
57.5°	115.4	132.9	306.0	494.1	1171.2	1336.7	1406.9	1467.1	1580.0	1622.6	1632.7
60°	107.8	125.4	265.9	423.9	1078.4	1251.4	1311.7	1371.8	1467.1	1502.3	1509.8
62.5°	100.3	120.3	235.7	356.1	983.1	1151.1	1211.3	1266.5	1346.7	1371.8	1381.8
65°	95.3	115.4	213.2	306.0	885.2	1045.8	1106.0	1153.6	1218.8	1243.9	1248.9
67.5°	90.3	110.4	195.6	263.3	787.4	940.5	985.6	1030.8	1080.9	1106.0	1108.5
70°	82.8	105.3	180.6	233.3	687.2	820.0	857.7	905.3	945.5	958.0	965.6
72.5°	77.8	97.8	170.5	210.6	584.3	704.7	739.8	767.4	802.6	815.1	815.1
75°	70.2	87.7	160.6	188.1	479.0	576.8	606.9	634.5	662.1	667.1	659.6
77.5°	62.7	77.8	137.9	158.0	373.7	456.5	481.6	496.6	519.1	524.1	526.7
80°	52.7	67.7	107.8	122.9	270.8	336.0	353.6	366.2	386.2	386.2	391.2
82.5°	40.1	52.7	77.8	87.7	183.1	230.7	245.8	253.3	265.9	265.9	265.9
85°	25.1	32.6	50.2	57.7	110.4	140.4	150.5	152.9	163.0	165.5	165.5
87.5°	12.5	17.6	32.6	35.1	57.7	72.7	72.7	77.8	77.8	75.3	72.7
90°	9.3	16.7	24.0	25.9	40.7	60.4	70.2	62.4	46.8	35.2	35.2
92.5°	37.0	99.8	162.7	178.4	250.9	347.4	395.6	346.7	249.0	175.7	168.7
95°	88.7	203.7	318.8	347.6	617.2	976.6	1156.4	1031.9	782.9	596.2	575.0
97.5°	153.4	254.9	356.4	381.8	831.3	1430.7	1730.4	1651.7	1494.4	1376.4	1336.1
100°	203.3	295.4	387.4	410.4	909.3	1574.4	1906.9	1912.7	1924.2	1932.8	1884.9
102.5°	245.9	331.8	417.6	439.1	945.0	1619.5	1956.8	2057.0	2257.5	2407.9	2366.8
105°	317.9	390.7	463.4	481.6	971.5	1624.7	1951.3	2176.0	2625.4	2962.5	2940.4
107.5°	391.9	459.7	527.5	544.4	976.3	1552.3	1840.3	2153.8	2780.7	3250.9	3256.3
110°	441.8	503.1	564.2	579.6	969.0	1488.2	1747.9	2098.3	2799.2	3324.8	3347.8



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	490.8	549.1	607.4	622.0	969.3	1432.3	1663.8	2022.4	2739.7	3277.7	3313.1
115°	564.7	618.6	672.4	685.9	978.2	1368.1	1563.0	1908.5	2599.5	3117.7	3166.7
117.5°	637.8	686.7	735.6	747.8	996.5	1328.0	1493.8	1805.6	2429.1	2896.8	2951.2
120°	680.3	726.4	772.4	783.9	1011.2	1314.4	1466.0	1750.9	2320.7	2748.0	2800.8
122.5°	721.9	768.4	814.8	826.4	1032.5	1307.3	1444.8	1701.3	2214.4	2599.2	2651.3
125°	785.7	827.9	870.3	880.9	1061.1	1301.5	1421.6	1639.6	2075.4	2402.3	2450.2
127.5°	837.4	880.1	922.9	933.6	1089.8	1298.0	1402.2	1589.3	1963.6	2244.2	2284.8
130°	865.2	911.2	957.3	968.7	1110.8	1300.2	1394.9	1561.4	1894.6	2144.5	2181.8
132.5°	893.8	939.9	985.9	997.4	1127.7	1301.5	1388.3	1537.4	1835.7	2059.4	2092.9
135°	936.3	978.2	1020.2	1030.7	1146.2	1300.2	1377.3	1502.2	1751.9	1939.2	1968.1
137.5°	979.8	1021.3	1062.8	1073.2	1173.9	1308.2	1375.4	1481.0	1692.1	1850.5	1874.1
140°	1015.9	1054.1	1092.2	1101.8	1190.8	1309.6	1369.0	1460.2	1642.6	1779.4	1801.4
142.5°	1043.5	1078.9	1114.3	1123.1	1205.1	1314.3	1369.0	1449.1	1609.3	1729.4	1748.4
145°	1086.1	1116.9	1147.8	1155.5	1223.5	1314.3	1359.7	1425.2	1556.3	1654.6	1668.9
147.5°	1128.6	1158.6	1188.6	1196.1	1250.6	1323.3	1359.7	1411.3	1514.3	1591.7	1603.6
150°	1156.4	1183.4	1210.5	1217.3	1264.7	1328.1	1359.7	1403.3	1490.3	1555.6	1565.3
152.5°	1185.0	1205.6	1226.1	1231.2	1274.0	1331.1	1359.7	1396.8	1471.2	1527.0	1534.3
155°	1227.5	1242.7	1257.9	1261.7	1294.4	1337.9	1359.7	1389.2	1448.4	1492.8	1497.6
157.5°	1258.9	1273.7	1288.5	1292.2	1314.7	1344.7	1359.7	1382.7	1428.7	1463.2	1466.6
160°	1280.3	1291.7	1303.2	1306.0	1323.9	1347.7	1359.7	1379.4	1418.9	1448.4	1450.4
162.5°	1301.5	1310.1	1318.7	1320.9	1333.8	1351.1	1359.7	1376.3	1409.6	1434.6	1436.5
165°	1324.6	1332.4	1340.1	1342.1	1347.9	1355.7	1359.7	1371.6	1395.5	1413.3	1415.3
167.5°	1345.9	1349.5	1353.3	1354.2	1359.1	1365.7	1369.0	1376.8	1392.4	1404.0	1404.8
170°	1359.7	1363.3	1367.1	1368.0	1368.3	1368.8	1369.0	1376.8	1392.4	1404.0	1404.0
172.5°	1367.1	1367.9	1368.8	1369.0	1369.0	1369.0	1369.0	1375.1	1387.4	1396.6	1395.9
175°	1377.3	1377.3	1377.3	1377.3	1374.5	1370.8	1369.0	1372.8	1380.6	1386.5	1386.5
177.5°	1377.3	1377.3	1377.3	1377.3	1375.1	1372.2	1370.8	1373.8	1380.0	1384.7	1383.9
180°	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3	1377.3



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	779.9	779.9
2.5°	832.6	827.6
5°	1070.9	1075.9
7.5°	1442.1	1439.5
10°	1793.1	1815.7
12.5°	2048.9	2054.0
15°	2204.4	2214.5
17.5°	2264.6	2267.2
20°	2267.2	2262.1
22.5°	2239.5	2234.6
25°	2206.9	2204.4
27.5°	2176.9	2179.3
30°	2164.3	2171.8
32.5°	2164.3	2176.9
35°	2169.4	2181.9
37.5°	2166.8	2181.9
40°	2156.8	2174.3
42.5°	2129.2	2141.8
45°	2086.6	2101.6
47.5°	2031.4	2041.4
50°	1961.2	1971.2
52.5°	1873.3	1875.9
55°	1768.0	1778.1
57.5°	1655.2	1657.7
60°	1529.8	1537.3
62.5°	1396.9	1396.9
65°	1256.4	1261.5
67.5°	1111.0	1123.6
70°	963.0	965.6
72.5°	817.6	817.6
75°	667.1	669.6
77.5°	524.1	524.1
80°	388.7	391.2
82.5°	268.3	273.4
85°	168.1	168.1
87.5°	77.8	70.2
90°	35.2	35.2
92.5°	140.7	112.7
95°	490.3	405.8
97.5°	1175.0	1014.0
100°	1693.0	1501.2
102.5°	2202.4	2038.1
105°	2852.1	2763.7
107.5°	3277.6	3298.9
110°	3439.8	3531.9



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3454.3	3595.6
115°	3362.7	3558.7
117.5°	3168.5	3385.9
120°	3012.0	3223.2
122.5°	2859.6	3067.8
125°	2642.1	2834.0
127.5°	2446.6	2608.5
130°	2331.4	2480.9
132.5°	2226.8	2360.7
135°	2083.6	2199.0
137.5°	1968.7	2063.1
140°	1889.7	1978.1
142.5°	1824.4	1900.4
145°	1726.4	1783.9
147.5°	1651.2	1699.0
150°	1603.9	1642.6
152.5°	1563.4	1592.7
155°	1516.9	1536.2
157.5°	1480.2	1493.8
160°	1458.2	1466.0
162.5°	1443.8	1451.2
165°	1423.0	1430.8
167.5°	1408.2	1411.5
170°	1404.0	1404.0
172.5°	1393.1	1390.2
175°	1386.5	1386.5
177.5°	1380.5	1377.3
180°	1377.3	1377.3



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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	5.52	6.33	6.55	7.37	8.77	18.68	19.49	19.71	20.53	21.93
	3H	6.22	6.95	7.26	8.00	9.42	20.51	21.24	21.55	22.29	23.71
	4H	6.51	7.20	7.57	8.26	9.68	21.15	21.84	22.20	22.89	24.32
	6H	6.76	7.40	7.82	8.45	9.89	21.58	22.21	22.64	23.27	24.71
	8H	6.83	7.44	7.89	8.51	9.94	21.69	22.30	22.76	23.37	24.80
	12H	6.85	7.42	7.92	8.49	9.95	21.76	22.33	22.83	23.40	24.86
4H	2H	12.72	13.41	13.77	14.46	15.89	18.95	19.64	20.01	20.69	22.12
	3H	14.28	14.86	15.35	15.94	17.38	20.99	21.56	22.05	22.64	24.08
	4H	14.37	14.90	15.45	15.97	17.43	21.75	22.28	22.82	23.35	24.81
	6H	14.38	14.84	15.46	15.93	17.39	22.28	22.74	23.36	23.83	25.28
	8H	14.36	14.78	15.44	15.87	17.34	22.44	22.86	23.52	23.95	25.42
	12H	14.31	14.70	15.41	15.80	17.27	22.53	22.91	23.63	24.01	25.49
8H	4H	15.81	16.24	16.89	17.32	18.79	21.80	22.23	22.88	23.32	24.79
	6H	16.05	16.40	17.15	17.53	19.00	22.43	22.78	23.53	23.91	25.37
	8H	16.07	16.38	17.18	17.49	18.98	22.64	22.95	23.75	24.06	25.55
	12H	16.03	16.31	17.15	17.41	18.94	22.78	23.05	23.90	24.16	25.69
12H	4H	15.95	16.34	17.05	17.44	18.91	21.75	22.14	22.85	23.24	24.72
	6H	16.31	16.62	17.42	17.73	19.21	22.41	22.72	23.52	23.83	25.32
	8H	16.37	16.65	17.49	17.75	19.28	22.63	22.91	23.75	24.01	25.54